

## **Amendment to the Claims**

Claims 1-27 (Canceled)

28. (Currently amended) The transgenic mouse of claim 36, wherein the transgenic mouse exhibits increased sensitivity to pain and increased susceptibility to seizure, relative to a wild-type control mouse.
29. (Currently amended) The transgenic mouse of claim 28, wherein the transgenic mouse responds more quickly to a thermal stimulus than a wild-type control mouse.
30. (Currently amended) The transgenic mouse of claim 28, wherein the transgenic mouse requires a lower dose of metrazol to reach characteristic seizure stages than does a wild-type control mouse.
31. (Currently amended) A method of producing a ~~the~~ transgenic mouse of claim 35, the method comprising:
- a) introducing into a mouse embryonic stem cell a targeting construct capable of disrupting a CASH gene;
  - b) introducing the mouse embryonic stem cell into a blastocyst;
  - c) implanting the resulting blastocyst into a pseudopregnant mouse, wherein said pseudopregnant mouse generates a chimeric mouse; and
  - d) breeding the chimeric mouse to produce the transgenic mouse.

Claim 32 (Canceled)

33. (Currently amended) A method of identifying an agent capable of modulating activity of a CASH gene or CASH gene expression product, the method comprising:
- a) administering a putative agent to the transgenic mouse of claim 35;
  - b) administering the agent to a wild-type control mouse;
  - c) comparing a physiological response of the transgenic mouse with that of the control mouse, wherein said physiological response is a change in pain sensitivity and/or susceptibility to seizure;
- wherein a difference in the physiological response between the transgenic mouse and the control mouse is an indication that the agent is capable of modulating activity of the CASH gene or CASH gene expression product~~target gene~~.

Claim 34 (Canceled)

35. (Currently amended) A transgenic mouse whose genome comprises a null endogenous CASH allele, ~~said null allele comprising exogenous DNA; said exogenous DNA comprising a gene encoding a visible marker where said marker is capable of expression in the brain.~~
36. (Previously presented) The transgenic mouse of claim 35 wherein said mouse is heterozygous for said null allele.
37. (Previously presented) The transgenic mouse of claim 35 wherein said mouse is homozygous for said null allele.
38. (Currently amended) The transgenic mouse of claim 35 wherein said ~~exogenous DNA~~ further null allele comprises a gene encoding a selection marker.
39. (Previously presented) The transgenic mouse of claim 38 wherein said gene is a neomycin resistant gene.
40. (Currently amended) The transgenic mouse of claim ~~35~~ 39 wherein said null allele further comprises a visible marker is lacZ gene.